Application No.: 10/569,475 Docket No.: 1155-0293PUS1
Reply dated May 18, 2010 Page 2 of 8

Reply to Office Action of February 18, 2010

## AMENDMENTS TO THE CLAIMS

 (Currently Amended) A telechelic polyolefin, which is represented by the following general formula (I):

wherein X is a group containing oxygen, and Y is a group containing nitrogen, P represents a chain [[the]] that exhibits syndiotacticity made from an olefin selected from the group consisting of propylene, 1-butene, 1-pentene, 3-methyl-1-butene, 1-hexene, 4-methyl-1-pentene, 3-methyl-1-pentene, 1-octene, 1-decene, 1-dodecene, 1-tetradecene, 1-hexadecene, 1-octadecene, 1-eicosene, and vinylcyclohexane, and-dienes-and-polyenes-having 3 to 20 earbon atoms, and X and Y are bonded to both terminals of P, wherein the molecular weight distribution (Mw/Mn) obtained by gel permeation chromatography (GPC) is from 1.0 to 1.5.

## 2. (Cancelled)

3. (Previously Presented) The telechelic polyolefin according to claim 1, which is obtained by: performing the following steps 1a, 2, and 1b in this order in the presence of an olefin polymerizing catalyst containing a compound (A) which contains a transition metal in the groups IV to V; and subsequently performing the following step 3 if necessary:

(step 1a) the step of reacting the olefin polymerizing catalyst with a polar-groupcontaining olefin (C) represented by the following general formula (II):

$$CHA=C(R)-Q-Y'$$
 (II)

wherein Y' is a group containing at least one element from oxygen, sulfur, nitrogen, phosphorus and halogens, Q is an alkylene group which may have a substituent, a carbonyl group, or bivalent oxygen, A and R each represent a hydrogen atom or a hydrocarbon group which may have a substituent, and A or R may be bonded together to Q to form a ring,

(step 2) the step of reacting the resultant compound of step 1a with at least one olefin (D) selected from ethylene and olefins having 3 to 20 carbon atoms n times wherein n is an integer of

Application No.: 10/569,475 Reply dated May 18, 2010

Reply to Office Action of February 18, 2010

l or more, provided that when n is an integer of 2 or more, the olefins (D) used in the respective contact operations are different in kind or composition,

(step 1b) the step of reacting the resultant compound of step 2 with the same or different polar-group-containing olefin (C), and

(step 3) the step of chemically converting the Y' group in the general formula (II) to a different group.

4. (Withdrawn) A process of preparing a telechelic polyolefin, which is represented by the following general formula (I):

wherein X and Y are each a group containing at least one element selected from oxygen, sulfur, nitrogen, phosphorus and halogens, X and Y may be the same or different, P represents a chain made mainly of an olefin composed only of carbon and hydrogen atoms, and X and Y are bonded to both terminals of P, wherein the molecular weight distribution (Mw/Mn) obtained by gel permeation chromatography (GPC) is from 1.0 to 1.5, wherein the telechelic polyolefin is obtained by: performing the following steps 1a, 2, and 1b in this order in the presence of an olefin polymerizing catalyst containing a compound (A) which contains a transition metal in the groups IV to V; and subsequently performing the following step 3 if necessary:

(step 1a) the step of reacting the olefin polymerizing catalyst with a polar-groupcontaining olefin (C) represented by the following general formula (II):

wherein Y' is a group containing at least one element from oxygen, sulfur, nitrogen, phosphorus and halogens, Q is an alkylene group which may have a substituent, a carbonyl group, or bivalent oxygen, A and R each represent a hydrogen atom or a hydrocarbon group which may have a substituent, and A or R may be bonded together to O to form a ring.

Docket No.: 1155-0293PUS1

Page 3 of 8

Application No.: 10/569,475 Docket No.: 1155-0293PUS1
Reply dated May 18, 2010 Page 4 of 8

Reply to Office Action of February 18, 2010

(step 2) the step of reacting the resultant compound of step 1a with at least one olefin (D) selected from ethylene and olefins having 3 to 20 carbon atoms n times wherein n is an integer of 1 or more, provided that when n is an integer of 2 or more, the olefins (D) used in the respective contact operations are different in kind or composition,

(step 1b) the step of reacting the resultant compound of step 2 with the same or different polar-group-containing olefin (C), and

(step 3) the step of chemically converting the Y' group in the general formula (II) to a different group.